Reduction of the Floral Parts of a Multiple Trillium in Successive Years

TITUS ULKE

In TORREVA 38: 125, 1938, appeared a somewhat distorted story and inaccurate description by Ruhoff of a *quintuple* or fifteenpetaled *Trillium grandiflorum*, two specimens of which, growing near each other, were almost simultaneously discovered by him and the writer on Old Rag Mountain, Va., on May 6, 1938.

The elevation of the locality was approximately 3,000 feet, not 2,500, as stated by Ruhoff, both specimens possessed three leaves, not nine as given in said description, and they were not collected on May 1. On the way down the mountain the rootstocks of both specimens became detached, but fortunately were not lost.

The rootstock of my plant was transplanted, with some of its granitic soil, to my rock-garden at the John Dickson Home, Washington, D. C., on May 6, 1938. It did not produce a flower in 1939, but fortunately shot up in 1940, in the middle of May, as a *triplicate* or nine-petaled *Trilium grandiflorum*, shown in the illustration. It was presented to the U. S. National Herbarium, minus the rootstock, which is still in my garden, and given the number 1786868.

The plant has a yellowish green stem, about 20 cm. high, three light green, rhombic ovate leaves averaging 8 cm. in length, and 4.5 to 4.8 cm. in greatest width, and a reddish brown peduncle 4 cm. long, terminated by the floral whorl 5 cm. in diameter. The distance from the top of the ascending rhizome to the whorl of leaves is 14.6 cm. There are six green, lanceolate sepals, the average length of the outer of which is 2.8 cm., while the inner sepals measure 2.5 cm. The petals, nine in number, and rose pink in color, are in three whorls, and their average length is as follows: outer petals, 2.2 cm., intermediate 1.6 cm., and the inner petals 1 cm.

The present habitat in granitic soil, its moisture condition, shade, and plant associations are somewhat like those of its mountain occurrence, the chief difference being the altitude, *i.e.*, 300 as against 3,000 feet above sea. It would seem that the transplantation to the new environment has brought about the dwarfing of the plant by a third of its length, *i.e.*, its decrease from 30 cm. height

to 20 cm., and the reduction of the number of petals from fifteen to nine in the bloom which came two years later from the same rootstock.

New and Noteworthy Northwestern Plants—Part 9, Notes on North American Thermopsis

HAROLD ST. JOHN

Thermopsis montana Nutt. var. ovata (B. L. Robinson) St. John, comb. nov.

- T. montana ovata subsp. B. L. Robinson ex Piper, U. S. Nat. Herb., Contrib. 11: 349–350, 1906.
- T. xylorhiza A. Nelson, Bot. Gaz. 52: 265-266, 1911.
- T. ovata (Robins.) Rydberg, Torrey Bot. Club, Bull. 40:43, 1913.

The writer has once previously studied the stout *Thermopsis* with broad elliptic leaflets growing in Idaho and Washington, and has published the conclusion that there was only one species present, *T. montana*, and that the subsp. *ovata* was a synonym of the species (St. John, Fl. S. E. Wash. 233–234, 1937).

M. M. Larisey has recently published a revision of the North American species of Thermopsis (Mo. Bot. Gard., Ann. 27:245-258, 1940). She accepts both montana and ovata as species, keys them and describes them. She accepts as valid T. ovata (Robins.) Rydb. (1913) while listing as its synonym T. xylorrhiza A. Nels. (1911). This name of Nelson's, which should be spelled as it was in the original publication, T. xylorhisa, was the first one published in the category. Hence, this name should be adopted if the plant is accepted as a species. When studying the problem at Pullman, Wash., the writer had available abundant collections from the Pacific Northwest, including an isotype of T. montana subsp. ovata. Now, at the Gray Herbarium, he has similar collections, the type of the subspecies, as well as large collections of T. montana Nutt. from the Rocky Mountains and the Nuttall type specimen. An isotype specimen of T. xylorhiza is also available. It is now evident that the true T. montana Nutt. of the central and eastern Rocky